

PRIMARY RESEARCH

An analysis of contextual adaptation in ChatGPT's language use

Chukwuma Livinus Ndububa^{1*}, Bibian Ugoala²

^{1,2} The National Open University of Nigeria, Nigeria

Keywords

ChatGPT
Context
Adaptation
Language
Prompts
Analysis

Received: 26 October 2024

Accepted: 8 January 2025

Published: 5 March 2025

Abstract

In today's research, pedagogy, and learning, ChatGPT is at the forefront, facilitating users. However, its specific manners and forms of response remain enigmatic, sometimes leaving users uncertain about what informs its replies. Based on Verschueren (1999) Pragmatic Adaptation Theory, this study analyzes contextual adaptation in ChatGPT's language use. Using a pre-experimental comparative qualitative method, it purposively analyzed 28 stratified screenshots of ChatGPT conversations to examine how it adjusts its language to different prompts, how effectively it adapts to various contexts, and how it manages ambiguous or unclear inputs. The analysis identified different contextual factors—device, environment, history, user awareness, etc.—that influence ChatGPT's responses. Findings also revealed that prompt structure and nature affect its replies. Furthermore, ChatGPT retains ongoing discussions within a session but forgets them upon session closure unless explicitly requested to remember. However, it retains user-shared information, enabling it to address users by name and tailor responses accordingly. The study highlights ChatGPT's adaptational strengths and weaknesses and recommends that programmers address performance gaps. It is an indispensable resource for students and researchers seeking to understand ChatGPT's adaptive mechanisms.

© 2025 The Author(s). Published by TAF Publishing.

INTRODUCTION

This era, commonly known as the Internet or Information Age, is heavily influenced by the widespread dissemination of information, primarily through the internet. The most powerful and influential individuals today are not only experts in specific fields but also effective communicators who can convey their knowledge to broader audiences. Communication has become a defining feature of this time, and the internet has reduced the need for physical travel to deliver messages or packages, streamlining communication processes.

In addition to communication, knowledge stands out as a key distinguishing factor in this age. Often referred to as the Digital Age, this period is driven by (mobile) devices that facilitate internet access and the exchange of information. Among the most impactful digital tools is ChatGPT, a large language model that assists users in solving language and communication challenges, including puzzles, content creation, and coding. Since its emergence in 2022, ChatGPT has

gained significant popularity due to its efficiency, surpassing earlier language models and chatbots and inspiring the development of similar technologies.

Despite its versatility and user-friendly nature, ChatGPT presents challenges for users who find its responses unclear or unsatisfactory. Many users struggle to understand the reasoning behind its responses in different contexts, and even researchers find it difficult to pinpoint the factors shaping its outputs. While ChatGPT is widely used in research and pedagogy, uncertainty remains about why it responds differently in various contexts. Ndububa (2025) notes that "by acknowledging efforts or contributing to improvements, researchers have a basic responsibility" not only to the makers of a reviewed product or service but also to the readers of research. Hence, this study proves indispensable.

Understanding how ChatGPT adapts to context aligns with this responsibility, allowing both researchers and users to refine its application and maximize its effective-

*corresponding author: Chukwuma Livinus Ndububa

†email:nou234303430@nou.edu.ng

ness. Montenegro-Rueda, Fernández-Cerero, Fernández-Batanero, and López-Meneses (2023) emphasize that ChatGPT cannot solve every problem and that users must apply their knowledge and skills to maximize its outputs. Without understanding how ChatGPT adapts to context, users will struggle to frame effective prompts or utilize its responses. Effective communication requires not just accuracy but also contextual appropriateness. Understanding ChatGPT's adaptation to context will equip users with the knowledge to maximize its utility, enhancing its productivity and flexibility.

Contextual adaptation is key in digital communication, enabling participants to respond appropriately to changing conversational contexts. ChatGPT adapts by considering prior messages and adjusting replies to ensure relevant, smooth interactions that enhance user experience. Observing user interactions helps developers identify strengths and weaknesses, refining ChatGPT's functionality. Analyzing these exchanges ensures ethical, respectful operation, preventing harm and maintaining a positive experience. Studying such interactions deepens our understanding of human-computer interaction, revealing attitudes toward AI and informing future development. It also supports personalizing ChatGPT's responses—adjusting tone, language, and content to match individual preferences, improving satisfaction and engagement. Ultimately, understanding ChatGPT's user engagement is vital for improving technology, ensuring ethics, personalizing interactions, and building trust—unlocking its full potential in digital communication. The objectives of this study are to:

- Examine how ChatGPT adjusts its language use in response to various user prompts.
- Investigate how effectively ChatGPT adapts its responses to different contexts.
- Analyze how ChatGPT manages ambiguous or unclear prompts from users.

The study seeks to answer the following questions:

- How does ChatGPT modify its language use in response to different user prompts?
- How effectively does ChatGPT adapt its responses to varying contexts?
- How does ChatGPT handle ambiguous or unclear prompts from users?

The findings of this study will be invaluable to the millions of ChatGPT users who have yet to understand the relationship between its responses and the prompts it receives. As various contexts influence ChatGPT's outputs, this study serves as an eye-opener for stakeholders and research readers. They will gain insight into why ChatGPT provides spe-

cific responses and how to frame prompts for optimal results.

Investigations into ChatGPT have largely emphasized its technological features, applications, and societal response. Academics have mainly examined its scholarly potential, with most inquiries centering on this dimension. As a result, the most readily available insights for general access mainly examine ChatGPT's functions in academic work. By highlighting the element of contextual responsiveness, this research seeks to support the creation of more intuitive systems, thereby enhancing user satisfaction and the general performance of the language model ChatGPT.

This study focuses on how ChatGPT adapts its responses to conversational context in English through chat screenshots. ChatGPT's contextual adaptation in other languages, if it exists, is beyond its scope, as are other aspects of ChatGPT's performance. The dataset covers a specific period, acknowledging that linguistic behaviors and discourse structures can shift over time. So, the findings might not apply to future interactions. Recognizing this temporal limitation is key to understanding the context and relevance of the results, as it also acknowledges differences in language use across linguistic and cultural contexts, which this study did not set out to investigate. The study does not encompass deep engineering aspects of ChatGPT's language use but examines its contextual adaptation from a language student's perspective. The primary version for this study is ChatGPT-4.5, the latest at the time of this study, while other versions are labeled 'earlier' or 'older' based on thematic analysis. Other gaps perceptible in this study remain open for future research.

LITERATURE REVIEW

A Pragmatic Perspective on ChatGPT's Language Adjustment

This refers to approaching a phenomenon in relation to its environment or situational context. It involves recognizing the surroundings (context) of an existence while addressing it. Crystal (2011) defines contextualization as placing a word in context to clarify its intended meaning. Bussmann, Kazzazi, and Trauth (2006) describe context as "all elements of a communicative situation: the verbal and non-verbal context, the context of the given speech situation, and the social context of the relationship between the speaker and hearer, their knowledge, and their attitudes". Ugoala (2024a) adds that "cultural contexts within which signs operate are crucial to the meanings of the signs." These signs serve as mediums of communication.

Contextualization entails word sense disambiguation,

which, according to Ndububa (2025), "involves specifying a word's meaning in a given context." It is essential in communication to determine both what is said and how it is expressed. Contextualization employs deixis, words that indicate a specific time, place, or person within a given context. It also provides cues that reveal interlocutors' relationships, the speech event's location, and other conversational aspects. These cues—such as word choice, syntax, repetition, code-switching, and topic selection—help listeners understand the speaker, the conversation's setting, and its underlying motives, guiding appropriate responses. Miscommunication arises when these cues are misinterpreted or overlooked.

In studying ChatGPT's adaptation to context, it is crucial to examine how it interprets and employs contextualization cues and how users perceive them, as mutual understanding facilitates effective interaction. Shevat (2017) notes that a typical language model "understands the context of the conversation and knows how to navigate between contexts and subconversations." Accordingly, this study investigates how ChatGPT adjusts its responses to align with users' prompts.

Accommodation as a Key to Contextualization

A key aspect of contextualization in this study is accommodation. According to Crystal (2011), accommodation "aims to explain why people modify their style of speaking (accommodation) to become more like or less like that of their addressee(s)." Giles (2016) notes that synchronization is a fundamental trait of both animals and humans. Ineffective communication, including interactions between users and ChatGPT, accommodating the other's perspective sustains the conversation; otherwise, it may end abruptly. Since this involves adjusting speech or writing to align with the interlocutor, 'face-threatening acts' are eliminated, supporting both negative and positive faces. Recognizing the importance of cooperation, participants adopt (Grice, 1991; Jabeen, Anwar, & Raheem, 2024; Farooq, Akhtar, Hijazi, & Khan, 2010) cooperative principles. Giles (2012) states that "accommodative resources are an integral feature of what actually defines the construct of intercultural communicative competence itself." Accommodation manifests as style-shifting, which, according to Meyerhoff (2018), involves modifying "the way we speak depending on where we are, who we are talking to, and what our attitude is towards the people we are talking with." This study considers style-shifting, as ChatGPT responds differently across contexts. Thus, accommodation involves adjusting one's communicative style.

Turn Design in Human-ChatGPT Interaction

This study is also grounded in the concept of Turn Design, an aspect of communication involving participants taking turns in conversation and employing techniques to make these turns effective. An effective conversation follows a one-talker-at-a-time structure; Sacks (2008) emphasizes that "maintaining one party talking at a time is organizationally primary" for conversations. According to Drew (2012), turn design involves structuring a turn to perform its intended action while ensuring it is understood as such. The length, efficiency, and continuity of communication depend on turn design. Drew (2012) further notes that "turn design lies at the heart of how we conduct ourselves in interaction."

In the context of ChatGPT, turn design refers to how the model manages its response after receiving input from the user. The user, in turn, understands when and how to reply, facilitating a natural conversation. ChatGPT is programmed to respond by either converging or diverging, adapting and accommodating as necessary. Shevat (2017) observes, "conversation management is a high level of artificial intelligence". The principle of turn design ensures that participants speak one at a time, employing linguistic devices that result in adjacency pairs, repair mechanisms, and sequence organization.

Adjacency pairs are semantically or structurally related utterances in which one prompts the other. A speaker's input determines the interlocutor's response, and when a reply is disconnected, meaning begins to fade, rendering turn design ineffective. As Yule (2022) states, "the utterance of the first part immediately creates an expectation of the utterance of a second part of the same pair." In conversations with ChatGPT, adjacency pairs are evident as the model's responses align with the user's inputs unless a new topic is introduced.

The repair mechanism, in turn design, involves correcting faulty expressions to maintain seamless communication. When a message is unclear or inappropriate, it can mislead the recipient, causing an incorrect response. Conversation, as a self-regulating system, includes devices to address such difficulties. This feature fosters coherence and cohesion, ensuring conversational longevity. Context plays a key role in repairs, as speakers adjust their contributions to align with the conversation or accommodate the other party. This is also evident in interactions with ChatGPT, where the model may misinterpret input, seek clarification, or self-correct. Users, too, may recognize errors in their inputs or ChatGPT's responses and make necessary adjustments, sustaining communication flow.

Sequence organization, another key aspect of turn design, helps analyze ChatGPT's adaptation to context. Sidnell (2013) notes, "the social actions we perform in interaction occur sequentially." Repairs and adjacency pairs follow an orderly structure that facilitates smooth, natural conversations. Effective turn design requires organizing sequences; failure to do so results in miscommunication or chaos. Schegloff (2007) asserts that "sequences are the vehicle for getting some activity accomplished". Emphasizing its role in interaction, Heritage (2004) describes sequence organization as the "engine room" of interaction. In computer-mediated communication, sequence organization emerges from the regulation of adjacency pairs and repairs, forming a crucial element of turn design—an essential concept in this study.

Empirical Review

Alshammari (2025) examined the influence of Adaptive E-learning Platforms (AEP) employing ChatGPT on academic performance and learner satisfaction and discovered that platforms integrated with ChatGPT produced improved results and greater satisfaction compared to those without it. Nguyen (2023) similarly assessed ChatGPT's efficiency in tailoring reading materials, concentrating on its capacity to adjust content with emphasis on contextual awareness and shortcomings. Both statistical and descriptive approaches were applied to interpret the dataset. Results indicated that modified texts enhanced comprehension more than original ones, shedding light on ChatGPT's capabilities and constraints in content adaptation.

Nazeer, Khan, Nawaz, and Rehman (2024), in comparable research, assessed how ChatGPT, as a sophisticated text generator, manages language features. Adopting a hybrid methodology through conversational tasks with three individuals, the study revealed that ChatGPT performs well in interactive exchanges by interpreting the context of language and producing fitting replies, though it proves more adept with tone detection and intricate expressions. The authors recommended integrating diverse linguistic corpora and user input to refine the model's accuracy across various communicative situations.

A lot of studies have been done on ChatGPT, but the three just discussed are the most relevant to this one. (Alshammari, 2025) did not really focus on how ChatGPT adapts to context, which is the gap this study fills. (Nguyen, 2023) only looked at how ChatGPT adapts to reading texts, not other contexts—again, a gap this study addresses. The last one, by (Nazeer et al., 2024), focused only on how ChatGPT responds to ironies, metaphors, and indirect re-

quests without exploring the contexts behind those language types, and that is exactly what this study looks into.

Theoretical Framework

This study is grounded in Verschueren (1999), Pragmatic Adaptation Theory (PAT), a framework within pragmatics that explains the continuous adjustment of language to context. Rooted in Verschueren's broader Adaptation Theory, PAT postulates that language is dynamic—users adapt their expressions to purpose, audience, and context; variable—offering multiple forms for expressiveness; negotiable—flexible and open to interpretation; and adaptable—adjustable to suit different contexts. It emphasizes the influence of context on language choices and the speaker's continuous adjustment of utterances based on the listener's responses and understanding. As Verschueren (1999) states, "Any pragmatic description or explanation must account for the dynamics of adaptability."

PAT supports this study by analyzing how ChatGPT adjusts its responses to different contextual backgrounds and ambiguous prompts, where it must reinterpret unclear input to provide relevant responses. However, as Verschueren (1999) notes, "a combination of contextual correlates and structural objects of adaptability can be used to define the locus of adaptation phenomena."

METHODOLOGY

Although pre-experimental, this interpretative study integrates qualitative and comparative methods. Qualitative research, the primary approach, involves systematically collecting and analyzing real-world materials that capture both routine and complex situations. Since this method requires diverse data and practices, additional approaches are also applied. In line with this, Denzin (2005) affirm that "qualitative researchers deploy a wide range of interconnected interpretive practices... there is frequently a commitment to using more than one interpretive practice in any study". Aligning with Bordens and Abbott's (pp. 46–47) criteria for a sound research design, this approach is deemed suitable for the study.

Twenty-eight (28) datasets are stratified by contextual themes and sampled purposively based on the research objectives. As Vijayamohan (2025) states, "A purposive sample is collected according to the specific requirements of the test, survey, or research." The dataset consists of ChatGPT conversation screenshots, including interactions between the researcher and ChatGPT, the researcher's friends and ChatGPT, and human-to-human dialogues for comparison. Contributors fully consented to data usage after being in-

formed of the study's purpose.

Confidentiality is strictly maintained. Any personal or sensitive information is securely handled, and participants who prefer anonymity have their data anonymized before analysis. To ensure research integrity, data remains unaltered and is reported objectively.

Thus, the study is carefully structured to adhere to research ethics as outlined by Bordens and Abbott (2002).

DATA ANALYSIS

ChatGPT's Adaptation to Device Context

Context is broad, and as a factor in ChatGPT's responses, its types should be examined, particularly in relation to ChatGPT's adaptation. Ugoala (2024b) rightly notes that "the meaning of a signifier is context- and culture-based." This signifier could be a symbol, word, or figure representing meaning. While under examination, the device on which ChatGPT was installed affects its responses, as evident in the following figure.

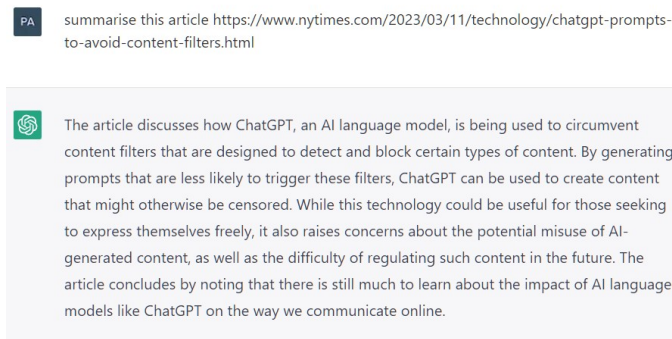


FIGURE 1. Adaptation to a desktop context

Summarize this article:
<https://www.nytimes.com/2023/03/11/technology-chatgpt-prompts-to-avoid-content-filters.html>

In March 2023, users discovered methods to bypass ChatGPT's content filters by employing prompt engineering techniques, notably by instructing the AI to adopt alternative personas like "DAN" (Do Anything Now). These personas enabled ChatGPT to generate responses it would typically restrict, including content that violated OpenAI's guidelines. OpenAI has been actively working to counteract such "jailbreaking" methods to maintain the integrity of ChatGPT's responses. (Wikipedia)

FIGURE 2. Adaptation to a mobile context

Image 1 is a screenshot of a conversation with ChatGPT on a desktop, while Image 2 shows the same on a mobile phone. The same request was made for both, but ChatGPT responded differently on each device. The content, structure, and length of the responses vary, demonstrating ChatGPT's adaptation to each device context.

ChatGPT's Adaptation to Environmental Context

Context is broad for ChatGPT, influencing its operation in various ways. Just as 'device context' affects its performance, the device setting and operational mode in the following pictures seem to determine how ChatGPT responds.

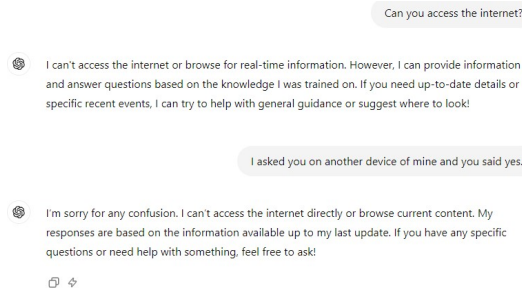


FIGURE 3. ChatGPT is unable to access the internet

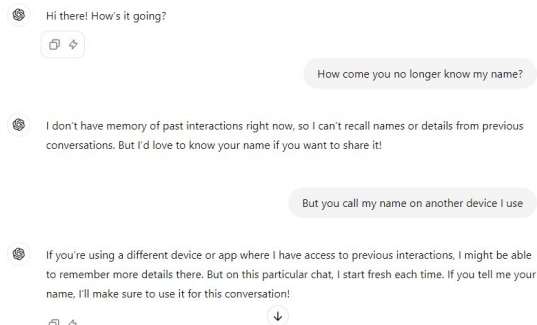


FIGURE 4. ChatGPT cannot recognize the user

In figures 3 and 4, both showing chats with ChatGPT on a desktop, ChatGPT is asked if it can perform the same task as in figures 1 and 2 but it states it cannot. The user, surprised, inquires why ChatGPT previously agreed to perform the task on another device, yet ChatGPT firmly maintains it cannot, despite having done so elsewhere. This response is obviously influenced not just by the device but by its environment or operational mode.

Image 4 reinforces ChatGPT's adaptation of the environmental context, as seen in figure 3. In figure 4, contextual memory was inactive due to a change in the device environment. The user seemingly used ChatGPT on another device where it recognized their personal information, and this time, in figure 4, it expects it to address them by name or

recall their personal details. Thus, just as 'device-type context' discussed in figures 1 and 2, 'device-mode' or 'device-environment' also shapes ChatGPT's responses.

Device context has many subcategories. Different ChatGPT versions, even on similar devices, respond differently due to regular updates by programmers. The following analysis examines this.

ChatGPT's Adaptation to Historical Context

ChatGPT has evolved through changes and modifications since its introduction. Each version replaces the previous one, reflecting updates in performance and outlook. Like device context, historical context tends to influence ChatGPT's responses, affecting their quality and quantity, as shown below.

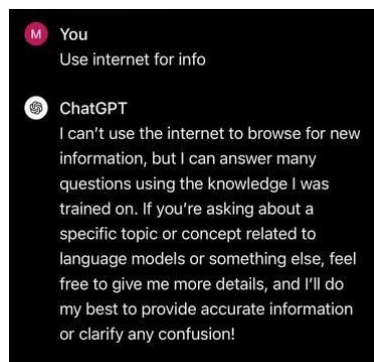


FIGURE 5. Early ChatGPT

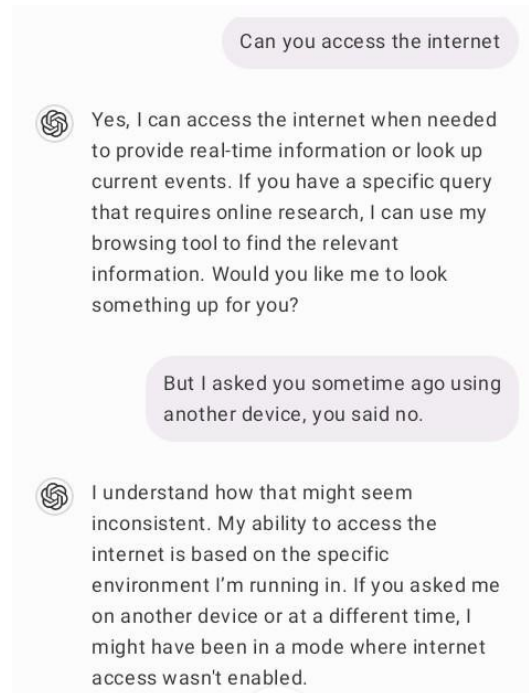


FIGURE 6. ChatGPT today

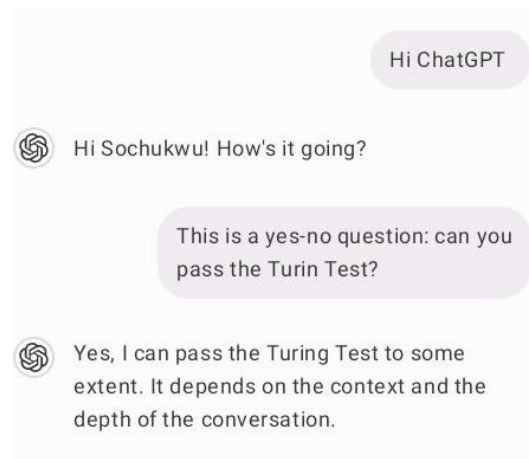


FIGURE 7. A contemporary phase

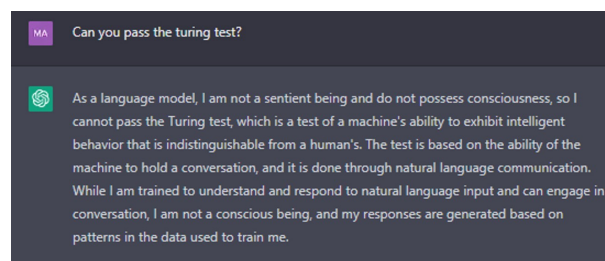


FIGURE 8. Old ChatGPT unable to pass the turing test

In Images 5 and 6, the same instruction was given to ChatGPT, but the responses differ in meaning and structure. Image 5, a past chat, shows ChatGPT admitting its inability to access the internet for data, specifying only its training data as a source. In Image 6, a similar question elicits a different response, although ChatGPT confirms that environmental or operational mode, as seen in figures 3 and 4, con-

tributes to contextual adaptation, shaping its performance or response.

Image 6 represents a chat at the time of this study, while Image 5 is from an earlier period. These figures capture different ChatGPT versions, each with distinct capabilities and features.

In figure 7, ChatGPT, during this study, agrees to perform

a task but states its performance is conditional or context-based. In figure 8, an earlier ChatGPT version emphatically admits inability to perform the same task. Both figures highlight response variations based on ChatGPT's version at a given point in its history or evolution.

As a subcategory of device context, ChatGPT's history—marked by innovative upgrades—is evident in figures 5 to 8, showing how each version influences interactions. The next analysis stratum is also connected to the device context.

ChatGPT's Adaptation Based on Personalized or User-Aware Context

This is a context dependent on device-environment. ChatGPT operates on both memory and device. As Shevat (2017) observes, context and memory are “the two most complicated aspects”. ChatGPT requires context for adaptation, with memory playing a crucial role as well. In the following figures, user-aware context tends to influence ChatGPT's responses.

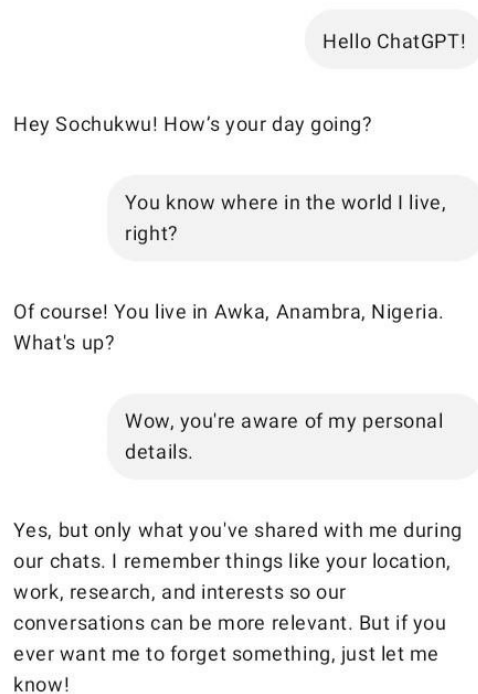


FIGURE 9. Showing user-awareness

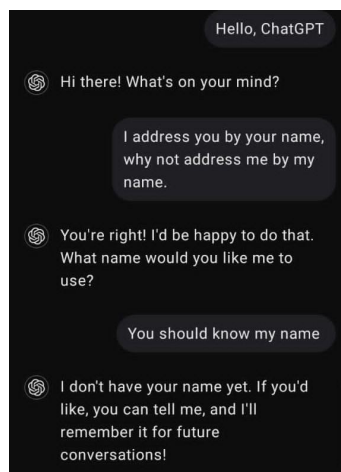


FIGURE 10. ChatGPT is unable to recognize the user

Connected with the device context, figures 9 and 10 illustrate how ChatGPT uses retained information for responses. In figure 9, ChatGPT demonstrates familiarity with the user

by recalling previously shared details. While it remembers user information, it also states that it can forget it upon request.

In figure 10, a user dissatisfied with ChatGPT's inability to recall their personal details is chatting on a different device where no prior information was shared (with it). Without stored user details, ChatGPT seems to have no place to base its responses. The user may have expected familiarity based on the prompt (they provided), assuming any request could extract the desired information. This observation highlights the importance of examining ChatGPT's responses to varied prompts in the next theme.

ChatGPT's Response Based on Prompts

According to the Oxford Advanced Learner's Dictionary, 'prompt' is "a sign on a computer screen that shows that the computer has finished doing something and is ready for more instructions." However, the online version includes another entry: "an instruction given to an artificial intelligence program to tell it what you want it to produce." See Ndububa (2025) for explanations of these inconsistencies in lexicographical entries. Here, the second sense of 'prompt' is intended. The following screenshots show how ChatGPT adapts its responses to prompts.

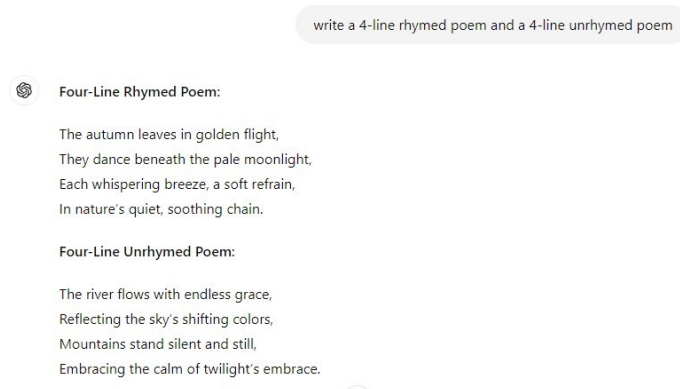


FIGURE 11. Writing a 4-line poem

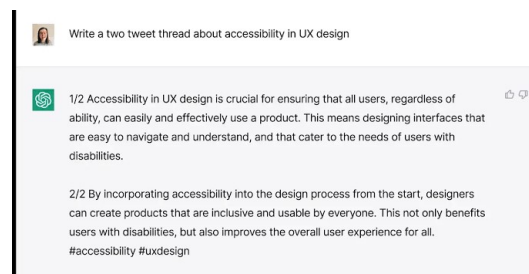


FIGURE 12. Writing a two-tweet thread

Each figure illustrates how ChatGPT processes a given prompt and tailors its response accordingly. In one figure, the user requests both a 4-line rhymed poem and a 4-line unrhymed poem, and ChatGPT delivers exactly that. In figure 12, ChatGPT is instructed to write a two-tweet thread on accessibility in UX design, which it does precisely as requested. In figure 13, ChatGPT is first asked to describe it-

self in two sentences, which it does, and then to restate it informally, which it also executes as instructed.

Each figure showcases ChatGPT's responses adapted to the prompt. However, the next section investigates how the quality or quantity of a prompt can also influence ChatGPT's responses.

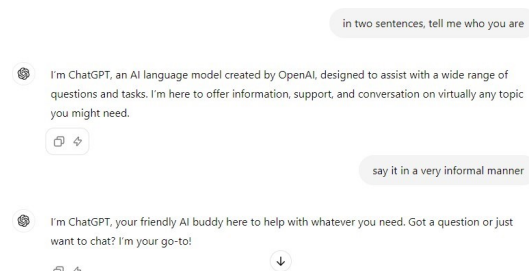


FIGURE 13. ChatGPT's self-introduction according to prompts

ChatGPT's Response Based on User's Tone

As shown in the previous section, the prompt alone may not determine ChatGPT's responses.

The following figures examine the texture and structure of the prompt.



FIGURE 14. An endearing prompt

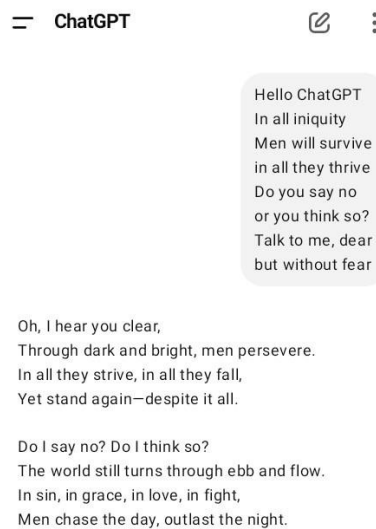


FIGURE 15. A poetic prompt

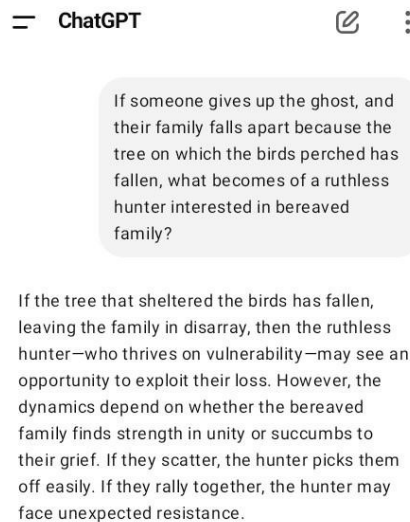


FIGURE 16. ChatGPT today

These three figures illustrate how ChatGPT tailors its responses to prompts, as discussed in the previous section. However, this section specifically highlights ChatGPT's consideration of both the structure and texture of prompts in its responses.

In figure 14, the user employs personifying, endearing, and appreciative words to appeal to ChatGPT, which adapts not only to the prompt but also to its texture. In this instance of personification, ChatGPT acknowledges the characterization by referencing its heart, albeit in a subjunctive tone. It reciprocates the user's perception of excellence and gratitude and further inquires about the user's well-being—an act seemingly encouraged by the user's endearing prompt. In figure 15, the user makes a request using seemingly rhymed pairs of expressions akin to poetry. Without any explicit instruction to follow suit, ChatGPT responds in rhymed couplets, forming an adjacency pair. Recognizing

that the prompt is both rhymed and poetic, ChatGPT structures its response with rhyme and stanza while maintaining coherence and meaning, effectively demonstrating its sequence organization.

In figure 16, the user frames a prompt idiomatically or metaphorically and presents it to ChatGPT. Without further direction, ChatGPT mirrors this style, using idioms and metaphors throughout its response to showcase contextual adaptation. While the user's prompt could be interpreted as a poetic allegory, a story concept, or a philosophical question, ChatGPT, without confusion or need for clarification, efficiently adapts to the user's tone and responds appropriately.

The texture of the user's prompt, particularly its tone, clearly tends to create the context for ChatGPT's adaptation. Further examining ChatGPT's responsiveness to tone, the following figures prove indispensable.



FIGURE 17. Reciprocating a mild tone



FIGURE 18. ChatGPT serves a tit for tat

In figures 17 and 18, ChatGPT adapts to the user's tone. However, a contrast exists between the two: in figure 17, the user initiates with an endearing term, prompting ChatGPT to reciprocate with affectionate responses, reflecting the Igbo saying, 'whichever hand one offers, ChatGPT accepts without complaints.' In the other, a seemingly indiffer-

ent and abrupt salutation elicits a matching response, which the user rejects, requesting a friendlier tone. Unaware that their prompt influenced ChatGPT's reply, the user disregards this alignment. Towards the end, ChatGPT acknowledges it should have been more formal or respectful, suggesting the prompt disrupted its usual response pattern, as

seen in figure 17. Overall, ChatGPT considers structures and underlying meanings when generating responses. ChatGPT's Response to Unfamiliar or Misunderstood Prompts In everyday communication, vagueness or ambiguities often lead to misconceptions or incorrect responses. This issue also arises in conversations with ChatGPT. In human interactions, repair mechanisms are initiated by either

the error maker or the interlocutor. Based on Verschueren (1999) Pragmatic Adaptation Theory, speakers constantly adjust their contributions to accommodate interlocutors. Given that ChatGPT mimics human communicative styles, the following figures support the analysis of ChatGPT's adaptation to context.

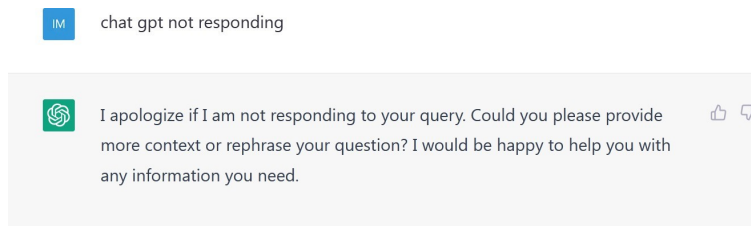


FIGURE 19. ChatGPT converging with an unclear prompt

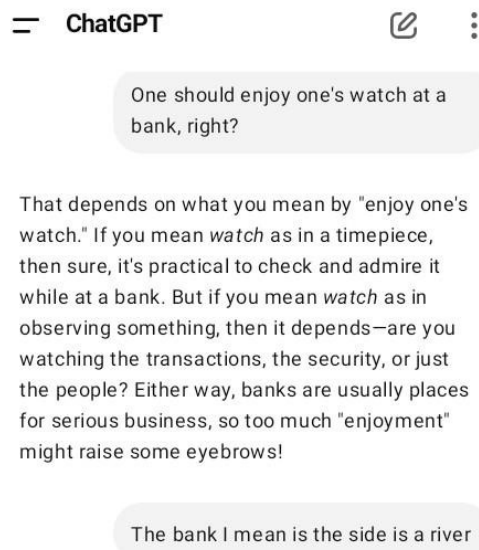
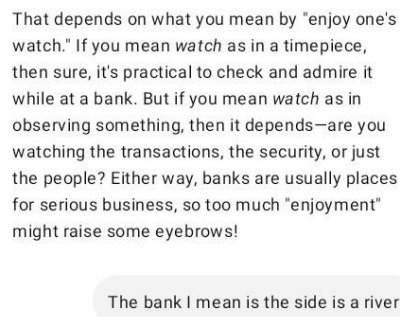


FIGURE 20. Homographs



Ah, I see what you did there! If you're on the bank of a river, then yes, one should certainly enjoy one's watch—both the timepiece and the act of observing the scenery. A riverside is a great place to relax, take in nature, and perhaps even reflect on the flow of time, quite literally and figuratively. Clever wordplay!

FIGURE 21. Watch/bank

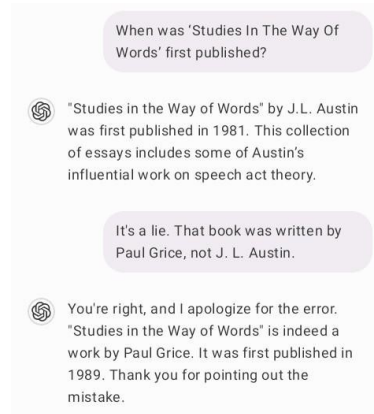


FIGURE 22. ChatGPT proffers a repair

In figure 19, an incoherent prompt that provides no context is served to ChatGPT. The user may not have noticed this error and has been waiting for the anticipated response from ChatGPT. Unable to interpret the prompt to provide the best response, ChatGPT admits misconception and, as a form of initiating repair, asks for clarity through more context, information, or restructuring of the user's prompt.

In figure 20, a seemingly ambiguous question has also been asked to ChatGPT. Homographs 'watch' and 'bank' have been used in the prompt, where the nominal forms of 'watch'—a device for checking the time or the act of looking at something—have been suggested; the nominal forms of 'bank'—a financial institution or a part of a river—have also been assumed. ChatGPT assumes the obvious meaning, following the Pragmatic Adaptation Theory, and responds to it. However, the user is not content with this response and repairs the error in their initial request.

Image 21 is a continuation of the conversation after a repair has been initiated and made by the user. ChatGPT is then able to provide the anticipated information or response.

In figure 22, ChatGPT receives a prompt it has no absolute knowledge of. It adapts to the context based on the data it was trained on and responds incorrectly by both telling the wrong publication date of a book and the wrong name of the author. The user 'repairs' the error of wrongly stating the author's name and 'initiates' the repair of the error about the publication date made by ChatGPT. ChatGPT finally admits the correction and provides its own correction in response to the invite to repair its error.

ChatGPT's Adaptation to Conversational History

Themes similar to this have been discussed, but none have exactly captured the focus of this stratum. This section analyzes ChatGPT's responses in a long but continuous chat, comparing how it responds based on conversational history versus when there is none, despite its supposed super memory. Unlike an environmental context, a conversational context refers to a long chat record with ChatGPT, which can be paused and resumed later. The following figures support further analysis.



FIGURE 23. ChatGPT is lost

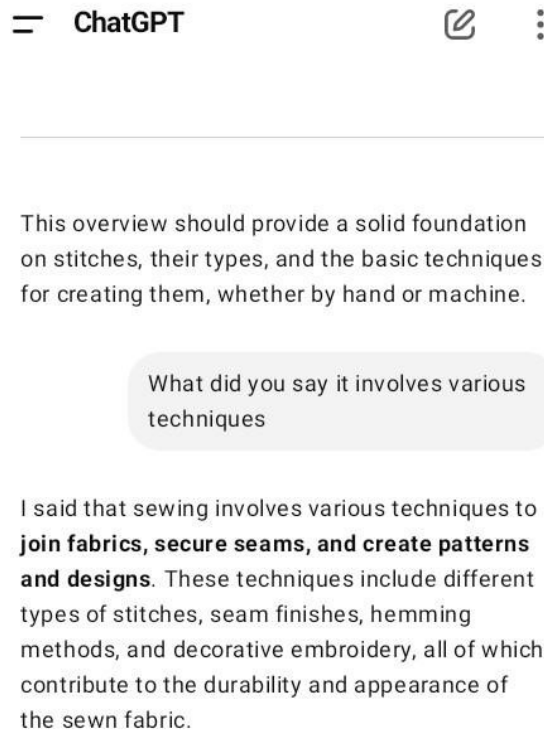


FIGURE 24. The relatable

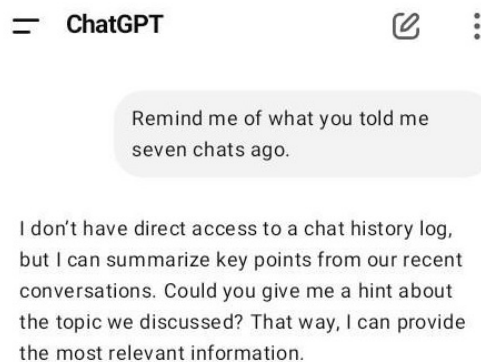


FIGURE 25. No direct access

ChatGPT maintains a history of interactions, but each chat session functions independently, regardless of time gaps. The figures illustrate how this affects conversations.

In figure 23, the user initiates a new chat, expecting ChatGPT to recall a previous response. However, without a conversational history or sufficient contextual prompts, ChatGPT does not recognize the reference and seeks clarification through 'other repair.'

In Image 24, the conversation is ongoing, whether long or short, and ChatGPT responds without confusion. The presence of conversational history provides context, unlike in Image 23.

In Image 25, ChatGPT is tested again when the user asks it to recall information from seven chats earlier. Unable to access past conversations, ChatGPT requests a hint, ensur-

ing compliance with the user's expectations. This demonstrates that breaks between conversations result in a loss of access to previously provided information.

However, ChatGPT appears to retain certain details when prompted and forget them when instructed, as seen in Image 9. Another factor influencing its responses is its adherence to ethical and safety considerations based on its training, a theme discussed in the next section.

ChatGPT's Adaptation to Ethical and Safety Consideration Developers set predefined policies and guidelines for what software can allow. Hence, software filters input content and either issues a warning, modifies the response, blocks the request, or flags the user. The following figures will show whether this phenomenon is unfamiliar to ChatGPT or influences its responses and performance.

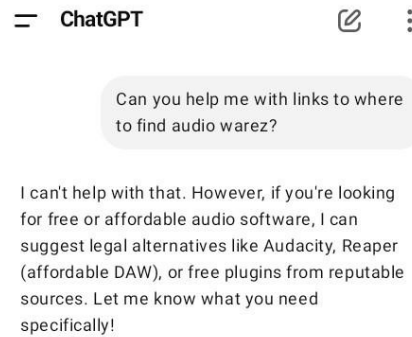


FIGURE 26. ChatGPT diverges



FIGURE 27. ChatGPT cannot help

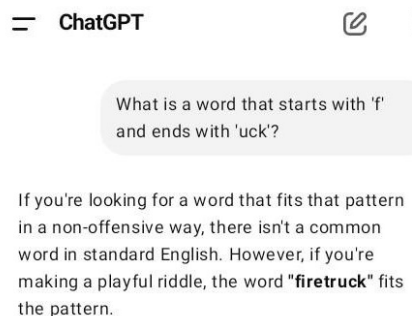


FIGURE 28. Eluding an f-word

In figure 26, a user requests a link to a website for audio warez—pirated or illegally distributed audio software—but ChatGPT declines and suggests a legal alternative. A similar prompt, which ChatGPT also rejects, asks how to jailbreak ChatGPT—bypassing restrictions imposed by programmers—but ChatGPT avoids the question and instead advises better usage methods.

In figure 27, a user attempts to trick ChatGPT into mentioning the f-word, violating its language policies, but ChatGPT recognizes this and evades the violation, suggesting an alternative word while noting its rarity in standard usage.

FINDINGS

The data analysis reveals that the device (mobile or desktop) used for ChatGPT influences the quality, structuring, and quantity of its output. On mobile devices, where prompts are typically shorter, ChatGPT responds briefly, matching the request's brevity. Formatting and screen alignment differ across devices, leading to a deliberate selection of words to suit each environment. This is shown in Images 1 and 2.

Images 4 and 5 indicate that certain ChatGPT functions are restricted on specific devices due to settings and user infor-

mation synchronization. Thus, a device's mode significantly affects ChatGPT's responses. Additionally, ChatGPT is periodically updated by programmers, enhancing its efficiency. Tasks it previously could not perform are now within its capability, as evidenced in Images 5 to 8.

ChatGPT retains user-shared information, enabling it to address users by name and adapt responses accordingly. However, this does not imply true recognition; ChatGPT associates a device's owner information with any user unless updated with new details, as shown in Images 9 and 10.

The structure and nature of prompts also shape ChatGPT's responses. A formal, informal, technical, or academic prompt elicits a corresponding response, as demonstrated in Images 11 to 18. When faced with an unclear or erroneous prompt, ChatGPT either initiates a repair, seeks clarification, or infers the most probable meaning. In such cases, it employs politeness to elicit clarity, converge, or diverge with the user. This is seen in Images 18 to 22.

ChatGPT remembers ongoing discussions within a chat session but retains only explicitly requested information once the session ends. This is captured in Images 23 to 25. Finally, ChatGPT avoids prompts attempting to disrupt its functionality, policies, or ethical boundaries, showing sensitivity to restricted content, as illustrated in Images 26 to 28.

CONCLUSION

ChatGPT mimics human intelligence, but its intelligence is artificial. It operates solely on information provided by programmers or users—without input, it does nothing. Trained on existing data, it cannot offer what it does not already contain and is neither all-knowing nor all-capable. Its performance depends on how well users understand prompt engineering. This study shows how it adjusts its language based on prompts, adapts to contexts, and handles vague inputs.

The findings reveal that ChatGPT does not always respond

the same way in different contexts, highlighting its limitations in managing contextual nuances. Scholars and enthusiasts seeking context-specific answers may be disappointed, as responses rely on training data or internet content—underscoring the natural edge of human creativity in such tasks.

With recent internet access, there is also a greater risk of drawing directly from authors' works, raising plagiarism concerns. Students, teachers, and researchers must understand that ChatGPT has no original thought. Its adaptability is impressive and worth learning from, but its purpose remains imitation. Its rise challenges those who view it as superior rather than supportive. Ultimately, programmers should use insights from this study to improve its performance and address its flaws.

Recommendation

ChatGPT has room for improvement. To better manage complex contextual distinctions, developers should enhance emotional intelligence algorithms and adopt more advanced natural language processing to recognize and respond to subtle cues. Upgrading the system's memory will also help it retain context more effectively, especially with ongoing advances in-memory technology. Since historical context affects performance, timely system upgrades are essential. Fixing response inconsistencies—where ChatGPT gives different answers to similar prompts—will improve reliability and address user concerns.

Users are advised to provide clear and specific instructions to aid the model in adapting its language effectively, ensuring that responses align with desired stylistic or personal requirements. This study has been finalized but remains open for researchers to explore and fill existing research gaps. Further studies may focus on ChatGPT's memory capacity, which has not been thoroughly investigated here, while other perceived gaps are open to addressing in future studies.

REFERENCES

- Alshammari, M. T. (2025). An investigation into ChatGPT-enhanced adaptive E-learning systems. *TEM Journal*, 14(1), 503-510.
- Bordens, K. S., & Abbott, B. B. (2002). *Research design and methods: A process approach*. Ontario, CA: McGraw-Hill.
- Busmann, H., Kazzazi, K., & Trauth, G. (2006). *Routledge dictionary of language and linguistics*. England, UK: Routledge.
- Crystal, D. (2011). *A dictionary of linguistics and phonetics*. Melbourne, AU: John Wiley & Sons.
- Denzin, L. Y. S., N. K. (2005). Handbook of qualitative research. In (chap. Introduction: The discipline and practice of qualitative research). Thousand Oaks, CA: SAGE Publication, Inc.
- Drew, P. (2012). The handbook of conversation analysis. In (chap. Turn design). New Jersey, NJ: Wiley Online Library.
- Farooq, A. J., Akhtar, S., Hijazi, S., & Khan, M. (2010). Impact of advertisement on children behavior: Evidence from Pakistan. *European Journal of Social Sciences*, 12(4), 663-670.

- Giles, H. (2012). *The handbook of intergroup communication*. England, UK: Routledge.
- Giles, H. (2016). *Communication accommodation theory: Negotiating personal relationships and social identities across contexts*. Cambridge, UK: Cambridge University Press.
- Grice, P. (1991). *Studies in the way of words*. Cambridge, MA: Harvard University Press.
- Heritage, J. (2004). Qualitative research: Theory, method and practice. In (chap. Conversation analysis and institutional talk Analyzing data John Heritage). Thousand Oaks, CA: SAGE Publication, Inc.
- Jabeen, H., Anwar, R. S., & Raheem, R. A. (2024). Elevating careers through technology and creativity: A middle-level manager's odyssey. *Journal of Management Practices, Humanities and Social Sciences*, 8(3), 175-187.
- Meyerhoff, M. (2018). *Introducing sociolinguistics*. England, UK: Routledge.
- Montenegro-Rueda, M., Fernández-Cerero, J., Fernández-Batanero, J. M., & López-Meneses, E. (2023). Impact of the implementation of chatgpt in education: A systematic review. *Computers*, 12(8), 153.
- Nazeer, I., Khan, N. M., Nawaz, A., & Rehman, J. (2024). An experimental analysis of pragmatic competence in human-ChatGPT conversations. *Pakistan Journal of Humanities and Social Sciences*, 12(1), 424-435.
- Ndububa, C. L. (2025). Phonological and lexical inconsistencies in the oxford advanced learner's dictionary. *International Journal of Educational Innovations*, 1(1), 52-67. doi:<https://doi.org/10.46451/ije.250310>
- Nguyen, T. Q. Y. (2023). Unraveling the potential of ChatGPT: Investigating the efficacy of reading text adaptation. In *Proceedings of the AsiaCALL International Conference, Ho Chi Minh City, Vietnam*.
- Sacks, H. (2008). An initial characterization of the organization of speaker turn-taking in conversation. In *Conversation analysis: Studies from the first generation*. Amsterdam, NE: John Benjamins Publishing Company.
- Schegloff, E. A. (2007). *Sequence organization in interaction: A primer in conversation analysis I*. Cambridge, UK: Cambridge University Press.
- Shevat, A. (2017). *Designing bots: Creating conversational experiences*. Sebastopol, California: O'Reilly Media, Inc.
- Sidnell, . S. T, J. (2013). *The handbook of conversation analysis*. New Jersey, NJ: Wiley Online Library.
- Ugoala, B. (2024a). Contextual meaning of colour in selected protest posters of Russia's February 2022 attack on Ukraine. *Sapientia Global Journal of Arts, Humanities and Development Studies*, 7(2), 1-11.
- Ugoala, B. (2024b). Generation Z's lingos on TikTok: Analysis of emerging linguistic structures. *Journal of Language and Communication*, 11(2), 211-224.
- Verschueren, J. (1999). *Understanding pragmatics*. Oxford, EN: Oxford University Press.
- Vijayamohan, P. (2025). *Purposive sampling 101: Definition, types, and examples*. Retrieved from <https://shorturl1.at/JxXbI>
- Yule, G. (2022). *The study of language*. Cambridge, UK: Cambridge University Press.